

IN THE CLAIMS:

1. – 31. (Cancelled)

32. (Currently amended) A method comprising:

delivering a ventricular pacing pulse to a heart;
sensing a ventricular signal resulting from the delivered pacing pulse;
detecting whether an autonomous intrinsic signal component is present
~~ventricular activity within the sensed ventricular signal within the heart after~~
delivering the pacing pulse; and
extending a pacing interval between the delivered ventricular pacing pulse
and a subsequently ~~delivered~~ scheduled ventricular pacing pulse if the
autonomous intrinsic signal component is detected ~~based on the detection of~~
~~intrinsic ventricular activity.~~

33. (Currently amended) The method of claim 32, further comprising
modifying the pacing interval to aid in detecting whether an autonomous intrinsic
signal component is present within ~~ventricular activity within the heart.~~

34. (Previously presented) The method of claim 33, wherein modifying the
pacing interval includes modulating an atrial to ventricular pacing delay.

35. (Previously presented) The method of claim 32, wherein the subsequently
delivered pacing pulse comprises a pacing pulse delivered to a ventricle of the
heart after the delivered pacing pulse.

36. (Currently amended) The method of claim 32, wherein detecting whether
an autonomous intrinsic signal component is present ~~ventricular activity within~~
the heart comprises comparing a past ventricular signal resulting from a past
pacing pulse with the ventricular signal resulting from the delivered pacing pulse.

37. (Previously presented) The method of claim 36, wherein a past ventricular signal comprises a past ventricular signal that is representative of a ventricular signal where the heart is fully captured by the past pacing pulse.

38. (Previously presented) The method of claim 36, wherein a past ventricular signal further comprises a most recent ventricular signal resulting from a most recent pacing pulse.

39. (Previously presented) The method of claim 37, wherein comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse comprises comparing at least one morphological characteristic of the past ventricular signal to a same morphological characteristic of the ventricular signal resulting from the delivered pacing pulse.

40. (Previously presented) The method of claim 39, wherein the morphological characteristic includes at least one of a minimum amplitude of a signal, a maximum amplitude of a signal, a width of a signal, a slope of a signal, T-wave timing and T-wave amplitude.

41. (Currently amended) A device comprising:

at least one electrode to deliver a ventricular pacing pulse to a heart and sense a ventricular signal resulting from the delivered pacing pulse; and

a processor that detects whether an autonomous intrinsic signal component is present~~ventricular activity~~ within the sensed ventricular signal within the heart after delivering the ventricular pacing pulse and extends a pacing interval between the delivered pacing pulse and a subsequently delivered scheduled pacing pulse if the autonomous intrinsic signal component is~~based on the detection of intrinsic ventricular activity detected~~.

42. (Currently amended) The device of claim 41, wherein the processor modifies the pacing interval to aid in detecting whether an autonomous intrinsic signal component is present~~ventricular activity~~ within the heart.

43. (Previously presented) The device of claim 42, wherein the processor modifies the pacing interval by modulation of atrial to ventricular delay.

44. (Previously presented) The device of claim 42, wherein the electrode comprises an electrode to deliver a pacing pulse to a ventricle of the heart.

45. (Currently amended) The device of claim 41, wherein the processor detects whether an autonomous intrinsic ventricular activity signal component is present~~ventricular activity~~ by comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse.

46. (Previously presented) The device of claim 45, wherein the processor that compares a past ventricular signal that is representative of a ventricular signal where the heart is fully captured by the past pacing pulse.

47. (Previously presented) The device of claim 45, wherein the processor compares a most recent ventricular signal resulting from a most recent pacing pulse.

48. (Previously presented) The device of claim 45, wherein the processor compares at least one morphological characteristic of the past ventricular signal to a same morphological characteristic of the ventricular signal resulting from the delivered pacing pulse.

49. (Previously presented) The device of claim 48, wherein the processor compares at least one of a minimum amplitude of a signal, a maximum amplitude of a signal, a width of a signal, a slope of a signal, T-wave timing and T-wave amplitude.

50. (Previously presented) The device of claim 45, further comprising a memory to store the past ventricular signal.

51. (Currently amended) A computer-readable medium comprising instructions to cause a processor to:

control a pulse generator to deliver a ventricular pacing pulse to a heart;
sense a ventricular signal resulting from the delivered ventricular pacing pulse;

detect whether an autonomous intrinsic ventricular activity signal component is present within the sensed ventricular signal within the heart after delivering the pacing pulse; and

extend a pacing interval between the delivered pacing pulse and a subsequently delivered scheduled pacing pulse if the autonomous intrinsic signal component is detected~~based on the detection of intrinsic ventricular activity.~~

52. (Currently amended) The computer-readable medium of claim 51, further comprising instructions to cause the processor to modify the pacing interval to aid in detecting whether an autonomous intrinsic signal component is present~~ventricular activity within the heart.~~

53. (Previously presented) The computer-readable medium of claim 52, wherein the instructions cause the processor to modify the pacing interval by modulation of atrial to ventricular delay.

54. (Previously presented) The computer-readable medium of claim 51, wherein the subsequently delivered pacing pulse comprises a pacing pulse delivered to a ventricle of the heart after the delivered pacing pulse.

55. (Currently amended) The computer-readable medium of claim 51, wherein the instructions cause the processor to detect whether an autonomous intrinsic signal component is present ~~ventricular activity~~ within the heart by comparing a past ventricular signal resulting from a past pacing pulse with the ventricular signal resulting from the delivered pacing pulse.

56. (Previously presented) The computer-readable medium of claim 55, wherein a past ventricular signal comprises a past ventricular signal that is representative of a ventricular signal where the heart is fully captured by the past pacing pulse.

57. (Previously presented) The computer-readable medium of claim 55, wherein the past ventricular signal further comprises a most recent ventricular signal resulting from a most recent pacing pulse.

58. (Previously presented) The computer-readable medium of claim 57, wherein the instructions cause the processor to compare the past ventricular signal resulting from the past pacing pulse with the ventricular signal resulting from the delivered pacing pulse by comparing at least one morphological characteristic of the past ventricular signal to a same morphological characteristic of the ventricular signal resulting from the delivered pacing pulse.

59. (Previously presented) The computer-readable medium of claim 58, wherein a morphological characteristic includes a minimum amplitude of a signal, a maximum amplitude of a signal, a width of a signal, a slope of a signal, T-wave timing and T-wave amplitude.